

PROJECT DESCRIPTION

GENERAL

THIS PORTION OF THE PROJECT INVOLVES THE RECONSTRUCTION OF THE EXISTING TRAFFIC SIGNAL POLE IN THE SOUTHEAST QUADRANT OF THE INTERSECTION OF MD 108 AND GREAT STAR DRIVE IN HOWARD COUNTY. IT INVOLVES THE INSTALLATION OF A NEW POLE AND MAST ARM, COUNTDOWN PEDESTRIAN SIGNALS, SIGNS, TRAFFIC SIGNAL HEADS AND DETECTORS. MD 108 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA SIX PHASE FULL-TRAFFIC-ACTUATED MODE WITH MD 108 APPROACHES OPERATING CONCURRENTLY WHILE GREAT STAR DRIVE AND THE DRIVEWAY TO/FROM KENDALL HARDWARE STORE WILL OPERATE IN A SPLIT PHASE MODE.

CONTROLLER REQUIREMENTS

THE EXISTING BASE MOUNTED CABINET AND CONTROLLER SHALL BE USED.
VIDEO DETECTION EQUIPMENT TO BE INSTALLED BY SHA FORCES.

PROJECT CONTACTS

THE CONTACT PERSON FOR SHA DISTRICT #7 ARE AS FOLLOWS:

MR. JOHN CONCANNON
ASSISTANT DISTRICT
ENGINEER - TRAFFIC
(301) 624-8140

MS. ANDREA ABEND
DISTRICT ENGINEER - UTILITY
(301) 624-8115

MR. EDWARD RODENHIZER
CHIEF TRAFFIC SIGNAL SHOP
(410) 787-7650

MR. RICHARD L. DAFF, SR.
CHIEF, TRAFFIC OPERATIONS
DIVISION
(410) 787-7630

THE POWER COMPANY REPRESENTATIVE IS :

BALTIMORE GAS ELECTRIC COMPANY
MR. KIETH MAYLE
7317 PARKWAY DRIVE SOUTH
HANOVER, MD 21076
(410) 859-9070

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION

CATEGORY CODE NO.	QUANTITY	UNIT	DESCRIPTION
900000	6.3	SF	SHEET ALUMINUM GROUND MOUNTED SIGN CONSISTS OF: 1- EA R3-TSIGN (30"x 30")
900000	74.2	SF	SHEET ALUMINUM MAST ARM/POLE MOUNTED SIGN CONSIST OF: 1- EA ROUTE MARKER ASSEMBLY (30"x51") 1- EA ROUTE MARKER ASSEMBLY (48"x75") 2 - D3-1 (72"x16") 1- R3-SR (30"x36") 1- R3-SL (30"x36") 1- R3-GL (30"x36")
900000	1	EA	VIDEO DETECTION INTERFACE EQUIPMENT-1 TO 4 CAMERA

EQUIPMENT LIST "B"

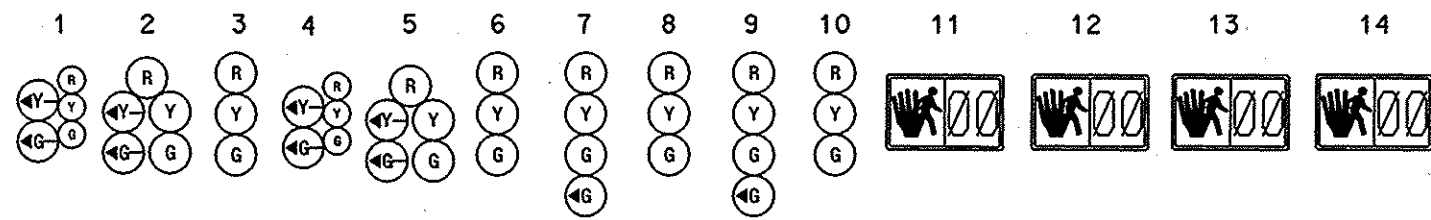
B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

CATEGORY CODE NO.	QUANTITY	UNIT	DESCRIPTION
100000	1	LS	MAINTENANCE OF TRAFFIC
585405	203	LF	5" WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
585412	320	LF	12" WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKING
585424	71	LF	24" LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKING
585428	3	EA	LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKING ARROW
585462	566	LF	REMOVAL OF EX PER PAVEMENT LINE MARKINGS - ANY WIDTH
800000	22	EA	12" RED OR GREEN LED SIGNAL HEAD SECTION
800000	12	EA	12" YELLOW LED SIGNAL HEAD SECTION
800000	4	EA	16 INCH, ONE WAY, COUNTDOWN PEDESTRIAN LED SIGNAL HEAD
800000	6	EA	8" LED SIGNAL R,Y,G HEAD SECTION
800000	1	EA	REMOVE AND DEPOSE OF EXISTING MATERIALS & EQUIPMENT
801004	5	CY	CONCRETE FOR SIGNAL FOUNDATION
801104	15	LF	WOOD SIGN SUPPORT 4 IN. X 4 IN.
802501	170	LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
805115	130	LF	3 IN. SCHEDULE 80 RIGID PVC CONDUIT - BORED
805118	210	LF	4 IN. SCHEDULE 80 RIGID PVC CONDUIT - BORED
805135	180	LF	3 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
805140	30	LF	4 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
810601	1	EA	NONINVASIVEMICROLOOP PROBE - 500 FT LEAD IN CABLE
810605	1	EA	NONINVASIVEMICROLOOP PROBE - 1000 FT LEAD IN CABLE
811001	5	EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
813014	6	SF	INSTALL GROUND MOUNTED SIGN
813015	74	SF	INSTALL OVERHEAD SIGN
816001	4	EA	VIDEO DETECTION CAMERA
816005	2	EA	CONTROL CABLE, 250 FOOT, VIDEO DETECTION CAMERA TO CONTROLLER
816010	2	EA	CONTROL CABLE, 500 FOOT, VIDEO DETECTION CAMERA TO CONTROLLER
818004	1	EA	10 FOOT BREAKAWAY PED POLE
818036	1	EA	STEEL POLE W/ SINGLE 50 FT MAST ARM
831010	1	EA	250 WATT HIGH PRESS SOD LAMP & LUM W/PHOTO CELL
837001	1	EA	GROUND ROD 3/4 IN. DIA. X 10 FT. LENGTH
860292	1	EA	CUT CLEAN GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE
861105	443	LF	ELECTRICAL CABLE - 2 CONDUCTOR NO.14 AWG
861107	753	EA	ELECTRICAL CABLE - 5 CONDUCTOR (NO.14 AWG.)
861108	1039	EA	ELECTRICAL CABLE - 7 CONDUCTOR (NO.14 AWG.)
861116	197	LF	ELECTRICAL CABLE - 2 CONDUCTOR NO.12 AWG TRAY CABLE
865001	2	EA	PUSHBUTTON AND SIGN
866104	1	EA	20 FT. LIGHTING ARM ON SIGNAL STRUCTURE

EQUIPMENT LIST "C"

C. ALL REMOVED SIGNAL MATERIALS ARE TO BECOME
THE PROPERTY OF THE CONTRACTOR.

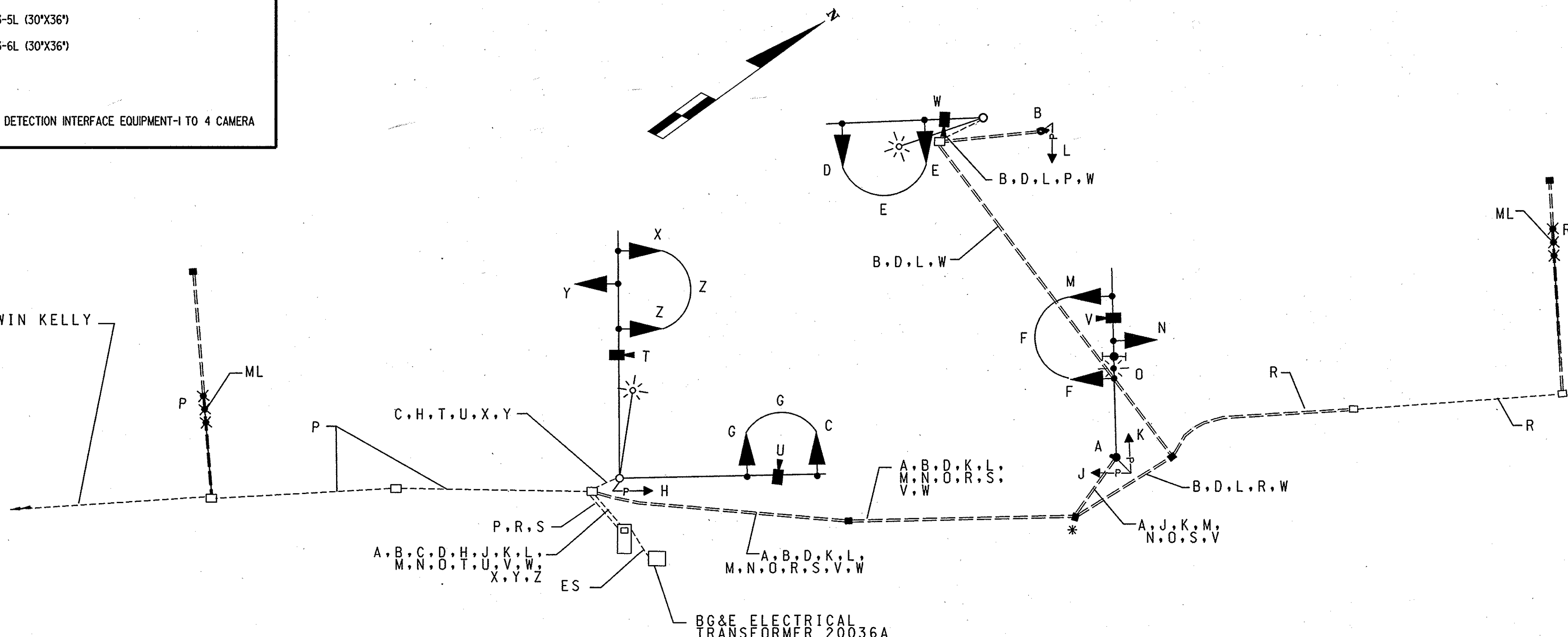
PHASE CHART



PHASE 1 & 5	R/G-	R/G-	R	R/G-	R/G-	R	R	R	R	R	DW	DW	DW	DW	
1 & 5 CHANGE TO PHASE 1 & 6 OR PHASE 2 & 5 OR PHASE 2 & 6															
PHASE 1 & 6	G/G-	G/G-	G	R	R	R	R	R	R	R	WK	WK	DW	DW	
PED CLEAR	G/G-	G/G-	G	R	R	R	R	R	R	R	FL/DW	FL/DW	DW	DW	
1 CHANGE	G/Y-	G/Y-	G	R	R	R	R	R	R	R	DW	DW	DW	DW	
PHASE 2 & 5	R	R	R	G/G-	G/G-	G	R	R	R	R	DW	DW	DW	DW	
5 CHANGE	R	R	R	G/Y-	G/Y-	G	R	R	R	R	DW	DW	DW	DW	
PHASE 2 & 6	G	G	G	G	G	G	R	R	R	R	WK	WK	DW	DW	
2 & 6 PED CLEAR	G	G	G	G	G	G	R	R	R	R	FL/DW	FL/DW	DW	DW	
2 & 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R	DW	DW	DW	DW	
PHASE 3	R	R	R	R	R	R	R	R	R	R	G/G-	G	DW	DW	
3 CHANGE	R	R	R	R	R	R	R	R	R	R	Y	Y	DW	DW	
PHASE 4	R	R	R	R	R	R	G/G-	G	R	R	DW	DW	DW	DW	
4 CHANGE	R	R	R	R	R	R	Y	Y	R	R	DW	DW	DW	DW	
PHASE 4 ALT	R	R	R	R	R	R	G/G-	G	R	R	DW	DW	WK	WK	
4 PED CLEAR	R	R	R	R	R	R	G/G-	G	R	R	DW	DW	FL/DW	FL/DW	
4 ALT CHANGE	R	R	R	R	R	R	Y	Y	R	R	DW	DW	DW	DW	
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK	

WIRING KEY

- A,B 2 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG.)
- E,F,G,H, J,K,L,Z 5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG.)
- C,D,M, N,X,Y 7 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG.)
- O 2 CONDUCTOR ELECTRICAL CABLE TYPE T/C (NO. 12 AWG)
- P,R NON-INVASIVE MICRO-LOOP PROBE LEAD-IN
- S STRANDED BARE COPPER GROUND WIRE (NO. 6 AWG)
- T,U,V,W VIDEO CAMERA DETECTION CABLE
- ML NON-INVASIVE MICRO-LOOP PROBE SET WITH 1000 FT LEAD-IN
- ES EXISTING SERVICE (UNDERGROUND)
- * GROUND ROD 3/4IN DIA.



STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

TRAFFIC SIGNAL PLAN
MD 108 AT GREAT STAR DRIVE

SCALE NO SCALE	DATE 11-2005	CONTRACT NO.
DESIGNED BY K.J.S.	COUNTY HOWARD	
DRAWN BY K.J.S.	LOGMILE 13010803.99	
CHECKED BY T.A.R.	T-I-M-S. NO. H158	
F.A.P. NO.	TOD NO.	
DRAWING NO. 75 30223	OF	SHEET NO. 2 OF 2

PREPARED BY
URS
HUNT VALLEY, MARYLAND

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BY: SWANN
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